

**NECAP SCIENCE 2008 GRADE 4 RELEASE ITEMS ALIGNMENT**

<b>Item #</b>	<b>GE Connection</b>	<b>Target Code</b>	<b>Domain</b>	<b>Target</b>	<b>Depth of Knowledge</b>
<b>1</b>	S3-4: 9	PS1.3 SAE	Physical Science	Students will use measures of weight (data) to demonstrate that the whole equals the sum of its parts.	<b>2</b>
<b>2</b>	S1-2: 14; S3-4: 3, 14	PS2.6 SAE, INQ	Physical Science	Students will experiment, observe, or predict how heat might move from one object to another.	<b>2</b>
<b>3</b>	SPK-K: 3; S:3-4 : 3, 9	PS3.7 INQ, SAE	Physical Science	Students will use data to predict how a change in force (greater /less) might affect the position, direction of motion, or speed of an object	<b>2</b>
<b>4</b>	SPK-4: 9	ESS1.1 INQ	Physical Science	Students will, given certain Earth materials l(soils, rocks, or minerals), use physical properties to sort, classify, and describe them.	<b>2</b>
<b>5</b>	SPK-4: 3 S1-2: 46; S3-4: 47	ESS1.2 INQ	Earth/Space Science	Students will use results from an experiment to draw conclusions about how water interacts with Earth materials (e.g. percolation, erosion, frost heaves).	<b>2</b>
<b>6</b>	SPK-4: 4 S3-4: 47	ESS1.4 INQ, SAE	Earth/Space Science	Students will explain how wind, water, or ice shape and reshape the Earth's surface.	<b>2</b>
<b>7</b>	S3-4: 49	ESS1.6 FAF	Earth/Space Science	Given information about Earth materials, explain how their characteristics lend themselves to specific uses.	<b>2</b>
<b>8</b>	SPK-4: 38;	LS1.1 INQ, POC	Life Science	Students will sort/classify different living things using similar and different characteristics; describe organisms belong to each group or cite evidence about how they are alike or not alike.	<b>2</b>
<b>9</b>	SPK-4: 34	LS2.5 SAE	Life Science	Students will recognize that energy is needed for all organisms to stay alive and grow or identify where a plant or animal gets its energy.	<b>1</b>
<b>10</b>	SPK-4: 39	LS4.9 POC	Life Science	Students will distinguish between characteristics of humans that are inherited from parents (i.e. hair color, height, skin color, eye color) and others that are learned (e.g. riding a bike, singing a song, playing a game, reading).	<b>1</b>
<b>11</b>	SPK-4: 5	INQ 3.8	Inquiry	Use accepted methods for organizing, representing, and manipulating data	<b>2</b>
<b>12</b>	SPK-4: 5	INQ 3.7	Inquiry	Follow procedures for collecting and recording qualitative or quantitative data, using equipment or measurement devices accurately. OR Follow multi-step procedures; make observations.	<b>2</b>
<b>13</b>	SPK-4: 6	INQ 4.11	Inquiry	Analyze data, including determining if data are relevant, artifact, irrelevant, or anomalous (specify relationships between facts; ordering, classifying data).	<b>2</b>
<b>14</b>	SPK-4: 6	INQ 4.12	Inquiry	Use evidence to support and justify interpretations and conclusions or explain how the evidence refutes the hypothesis.	<b>2</b>
<b>15</b>	SPK-K: 7	INQ 4.12	Inquiry	Use evidence to support and justify interpretations and conclusions or explain how the evidence refutes the hypothesis.	<b>3</b>
<b>16</b>	SPK-K: 1,2	INQ 1.1	Inquiry	Analyze information from observations, research or experimental data for the purpose of formulating a question, hypothesis or prediction.	<b>3</b>
<b>17</b>	SPK-K: 3,4	INQ 2.5	Inquiry	Develop an organized and logical approach to investigating the question, including controlling variables.	<b>3</b>